

WHAT IS NEW AND DESIRED TO BE SECURED BY LETTERS PATENT OF THE
UNITED STATES IS:

5 1. A communication node comprising:
means for dividing a packet to be transmitted into segments to form a plurality of
packet segments;

means for selecting an error correction scheme from among a plurality of error
correction schemes to be employed for each of the packet segments in accordance with
predetermined criteria;

means for carrying out an error correction process on each packet segment with the
selected error correction scheme; and

means for transmitting each processed packet segment to a network.

2. A communication node comprising:
means for receiving packet segments from a network;
means for selecting an error correction scheme from among a plurality of error
correction schemes to be employed for each of the received packet segments based on
predetermined information contained in each received packet segment;

means for carrying out an error correction process on each received packet segment
with the selected error correction scheme; and

means for forming an original packet from the plurality of processed packet segments.

20 3. A communication node according to Claim 1, further comprising:
means for negotiating with another communication node connected to the network,
prior to transferring the plurality of packet segments, the error correction scheme to be
employed in relation to particular packet segments.

25 4. A communication node according to Claim 2, further comprising:
means for negotiating with another communication node connected to the network,
prior to transferring the plurality of packet segments, the error correction scheme to be
employed in relation to particular packet segments.

5. A communication node according to Claim 1, wherein each of said plurality of packet segments has a field identifying the selected error correction scheme, and
said communication node further comprises means for identifying, in said field, said information corresponding to the selected error correction scheme.

5 6. A communication node according to Claim 2, wherein each of said plurality of packet segments has a field identifying the selected error correction scheme, and
said selecting means selects the error correction scheme to be employed based on the information in said field.

7. A communication node according to Claim 1, wherein each of said plurality of packet segments has a field identifying the selected error correction scheme, and
said communication node further comprises means for negotiating with another communication node connected to the network, prior to transferring the plurality of packet segments, the error correction scheme to be employed in relation to particular packet segments.

8. A communication node according to Claim 2, wherein each of said plurality of packet segments has a field identifying the selected error correction scheme, and
said communication node further comprises means for negotiating with another communication node connected to the network, prior to transferring the plurality of packet segments, the error correction scheme to be employed in relation to particular packet segments.

9. A communication node according to Claim 1, wherein the error correction scheme employed for a particular one of said packet segments has a higher correction ability than another error correction scheme employed for the other packet segments.

10. A communication node according to Claim 2, wherein the error correction scheme employed for a particular one of said packet segments has a higher correction ability

than another error correction scheme employed for the other packet segments.

11. A communication node according to Claim 10, wherein said particular one of said packet segment is a packet segment including a header portion of said original packet.

12. A communication node according to Claim 1, wherein the selecting means determines the error correction scheme by referring to a higher-level protocol field of said packet.

13. A communication node according to Claim 1, wherein the selecting means determines the error correction scheme by referring to a port number in said packet.

14. A packet transferring method comprising the steps of:

dividing a packet to be transmitted into segments to form a plurality of packet

segments;

selecting an error correction scheme from among a plurality of error correction schemes to be employed for each of the packet segments in accordance with predetermined criteria;

carrying out an error correction process on each packet segment with the selected error correction scheme; and

transmitting each processed packet segment to a network.

15. A packet transferring method according to Claim 14, further comprising:

receiving the packet segments from the network;

determining the selected error correction scheme from the plurality of error correction schemes to be employed for each of the received packet segments based on predetermined information contained in each received packet segment;

carrying out an error correction process on each received packet segment with the selected error correction scheme; and

forming the packet from the plurality of processed packet segments.